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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,457	10/01/2003	Kwan-Heung Kim	Q76247	5533

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EXAMINER

DESIR, JEAN WICEL

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,457

Applicant(s)

KIM, KWAN-HEUNG

Examiner

Jean W. Désir

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8 and 9 is/are rejected.
- 7) ☒ Claim(s) 2,3,6,7 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Ogawa et al (US 6,247,817).

#### **Claim 1:**

Ogawa discloses:

“a light generator”, see col. 8 lines 19-20;

“a mirror device for reflecting illumination emitted from the light generator, thereby changing a path of the illumination, wherein a reflection angle of the illumination can be adjusted”, see col. 10 lines 12-22, 50-59, col. 13 line 56 to col. 14 line 3;

“and a projection apparatus for enlarging and projecting the image produced in the image producer on the screen by reflecting the image to an incident illumination from the mirror device”, see col. 8 lines 27-36, col. 9 lines 41-50,

“wherein the path of the illumination is aligned to correspond for the whole image produced in the image producer to be projected on the screen by adjusting the mirror device”, see col. 10 lines 50-59.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al (US 6,247,817) in view of Bassi et al (US 2003/0231261).

Claim 4:

Ogawa does not explicitly say that the image producer is a DMD (Digital Micromirror Device) as claimed in claim 4; however, Ogawa teaches that the image producer is a LCD (Liquid Crystal Device), see Ogawa at col. 25 lines 43-45; and Bassi teaches that it is notoriously well known in the art to use DMD as image producer (see Bassi at paragraph [0043], *Note: DLP is also call DMD*), Ogawa suggests that at col. 25 lines 43-45 where he said other types of modulating devices can also be used; thus, because of these teachings an artisan would be motivated to combine the references to arrive at the claimed invention; this combination would advantageously produce a projection system where the brightness of the projected image is improved and optical/geometric distortions are corrected. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

**Claim 5** is also rejected for the same reasons as claims 1, and 4; a prism as claimed is disclosed see Ogawa at col. 9 lines 45-50.

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Claim 8: color filter as claimed in claim 8 is not explicitly disclosed in the above combination; however, Official Notice is taken, color filter is a notoriously well known device in the art used to provide red-green-blue color from a light source in a time-sequential manner; an artisan would be motivated to include color filter in the above combination in order to have red-green-blue color from the light source. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

**Claim 9** is rejected for the same reasons as claim 5; a body as claimed is disclosed see Bassi at paragraph [0005], a second mirror as claimed is also disclosed see Bassi at Fig. 6 item 66.

#### ***Allowable Subject Matter***

5. Claims 2, 3, 6, 7, 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (571) 272 7344. The examiner can normally be reached on 5/4/9 - First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272 7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JWD**  
**Sep. 25, 06**



DAVID OMETZ  
SUPERVISORY PATENT EXAMINER